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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/760,461	01/21/2004	Jun Someya	1190-0581P	1408

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EXAMINER	
WU, XIAO MIN	

ART UNIT	PAPER NUMBER
2629	

DATE MAILED: 12/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/760,461	SOMEYA ET AL.	
	Examiner	Art Unit	
	XIAO M. WU	2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02 October 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-8,10-14 and 16-39* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8,10-14 and 16-39* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1-8, 10-14 and 16-39 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-6 of U.S. Patent No. 6,756,955. Although the conflicting claims are not identical, they are not patentably distinct from each other because they are claiming similar subject matter. The following side-by-side comparison are comparing two representative claims from claim 1 of the US Patent No. 6,756,955 and claim 1 of the instant application.

US Patent No. 6,756,955	Instant application ((10/760,461)
1. A liquid crystal driving circuit that generates image data from gray-scale values on an input image made up of a series of frames, the image data determining voltages applied to a liquid crystal to display the input image, the liquid-crystal driving circuit,	1. An image data processor for a liquid-crystal display that generates image data determining voltages applied to a liquid crystal from gray-scale values of an input image made up of a series of frames, the image processor comprising:

comprising:	
a first color space transformation unit that receives an image signal corresponding to a frame of the input image as a color signal in a first color space and converts the image signal from the first color space to a second color space;	
an encoding unit connected to the output of the first color space transformation unit, that receives the images signal in the second color space and encodes the second color space image signal creating a compressed image signal;	an encoding unit for encoding an input image data of a present frame and outputting an encoded image data;
a delay unit connected to the output of the encoding unit that delays the encoded image signal by one frame interval creating a delayed compressed image signal; a first decoder connected to the output of the encoding unit that decodes the compressed image signal;	a first decoding unit for decoding the encoded image data and outputting a first decoded image data corresponding to the present frame; a delay unit for delaying the encoded image for an interval corresponding to one frame and outputting a delayed encoded image data;
a second decoder connected to the output of the delay unit that decodes the delayed compressed image signal;	a second decoding unit for decoding the delayed encoded image data and outputting a second decoded image data corresponding to a previous frame;
a second color space transformation unit connected to the output of the first decoder that converts the decoded image signal from the color signal in the second color space to a color signal in the first color space;	
a third color space transformation unit connected to the output of the second decoder that converts the delayed decoded image signal from the color signal in the second color space to a color signal in the first color space;	
a compensation data generator that generates compensation data for adjusting the gray scale values in the image signal according to the color space converted image	a compensation data generator for generating compensation data for adjusting the gray-scale values of the present frame according to the first decoded image data and the second

signal and the delayed color space converted image signal; and	decoded image data;
a compensation unit that generates the image data according to the inputted image signal and the compensation data;	and a compensation unit for generating said image data according to the input image data and the compensation data.
wherein the second color space includes luminance and chrominance signals and wherein during encoding the chrominance signals are compressed at a higher ratio than the luminance signals.	

From the comparison above, it is noted that claim 1 of the instant application is broadening from the claim 1 of the US Patent No. 6,756,955. It would have been obvious to delete the color space transformation unit in claim 1 of the US Patent No. 6756,955 because it is not necessary to converts the image signal from one color space to another color space it the two devices are the same.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 10-11, 24, 30-31 and 33 are rejected under 35 U.S.C. 102(e) as being anticipated by Sakashita (US Patent No. 6,661,400).

As to claims 10, 24, 33, Sakashita discloses an image data processor for liquid-crystal display that generates image data determining voltages applied to a liquid crystal from gray-scale

values of an input image made up a series of frame, the image data processor comprising: a data conversion unit (204, Fig. 1) for reducing the number of bits of an input image data of a present frame, thereby generating a first converted image data corresponding to the present frame; a delay unit ((206, Fig. 1) delaying the first converted image data for an interval corresponding to one frame and outputting a second converted image data corresponding to a previous frame; a compensation data generator ((205, 207, Fig. 1) for generating compensation data for adjusting the gray-scale value of the present frame according to the first converted image data and the second converted image data; and a compensation unit (209, Fig. 1) for generating the image data according to the input image data and the compensation image data.

As to claim 11, Sakashita discloses the compensation data cause the liquid crystal to reach transimissivity values corresponding to the gray-scale values of the input image within substantially one frame interval (see Fig. 2).

As to claims 30, 31, Sakashita discloses an image data processor (Fig. 1) for adjusting transimissivity values of liquid crystal comprising: an encoding unit (202, 204, Fig. 1) for encoding an input image data of a present frame and outputting an encoded image data; and a processing unit (Fig. 1) for processing the input image data using the encoded image data; wherein the image data processed by the processing unit includes data that changes a transimissivity corresponding to the frame prior to the present frame to a transimissivity corresponding to the present frame within substantially one frame interval (see Figs. 3A and 3 B).

Response to Arguments

5. Applicant's arguments filed 10/2/2006 have been fully considered but they are not persuasive.

With regarding to double patenting rejection in claim 1, 18 and 32, applicant states that a Terminal Claimer has been concurrently filed and attached hereto. However, there is no Terminal Disclaimer was found in the record.

With respect to Double Patenting Rejection, applicant argues that claims 10, 16, 24, 25 and 27 are distinguishing from claims of US Patent No. 6,756,955. this argument is not persuasive because claims 10, 12,24, 25 and 27 are broadening from claims of US Patent No. 6,756,955 and they are patentably distinct from each other.

With respect to claims 10-11, 24, 30-31 and 33, a newly found prior art to Sakashita (US Patent No. 6,661,400) has been applied. See the discussion of Sakashita above.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to XIAO M. WU whose telephone number is 571 272-7761. The examiner can normally be reached on 6:30 am to 4:00 pm.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

x.w.

December 10, 2006

XIAO M. WU
Supervisory Patent Examiner
Art Unit 2629